DOCUMENT RESUME

ED 167 148 IR 006 906

AUTHOR Crawford, Lou Ellen
TITLE Confirmation and Interpretation of Student Attitudes Toward the Library at the University of Colorado, Colorado Springs.
PUB DATE 77
NOTE 45p.

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS Higher Education; *Library Materials; *Library Services; Research Methodology; *Student Attitudes; Student Characteristics; Tables (Data); *University Libraries; *Use Studies

ABSTRACT

The study described was designed to discern attitudes of undergraduate and graduate students toward existing library services and products to provide a basis for library program development aimed at increasing use and knowledge of services, products, and facilities. A survey questionnaire was administered during class sessions to obtain responses from 15 percent of the total student population. Questions dealt with degree of library use; factors that affect library use; use of other area libraries; knowledge of available resources and their use--card catalog, periodicals, indexes and abstracts, government documents, reference books, interlibrary loan, special collections, reserve, audiovisual, and leisure reading material; the role of librarians; and taking a library-use course for credit. Data are tabulated question by question, cross tabulated with class level attained, and cross tabulated by several key variables to discover cause and effect relationships between degree of library use and use of other libraries, and knowledge of library resources, factors affecting library use, degree status, and the library's image. (Author/MBR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED167148

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

CONFIRMATION AND INTERPRETATION OF STUDENT ATTITUDES TOWARD THE LIBRARY AT THE UNIVERSITY OF COLORADO, COLORADO SPRINGS

by

Lou Ellen Crawford

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Lou Ellen Crawford

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

IR006906

Confirmation and Interpretation of Student Attitudes Toward the Library at the University of Colorado, Colorado Springs

by

Lou Ellen Crawford, Research Associate

Goals

This study was undertaken for the purpose of discovering attitudes toward products and services of the existing system of the Library on the campus of the University of Colorado at Colorado Springs. The findings provide baseline data for use in comparing data gathered sixteen months from the time this survey was conducted. In order to determine what strengths and weaknesses operate within the system and what changes and adjustments need to be implemented, responses to library resources, services and service representatives were measured. It was felt that such measurements would provide the basis for program development aimed at increasing use and knowledge of library services, products and facilities.

Problems

A review of the literature reveals that a significant problem inherent to many college and university libraries is that of student apathy toward the role of a library in the educational process. Tauber (1967) has observed that "in quantitative terms the...library spends a major part of its resources and effort in the service of a relatively small segment of its potential clientele." Thus, questions may arise as to the utility function of the library: Is there a belief among students (and faculty) that teaching methods should encourage student use of library resources? If there is such a philosophy, and if the library is viewed as an integral part of education, then effort might be made to determine the extent to which teaching methods must go in order to encourage library use.

A survey questionnaire administered to students at the University of Colorado in Boulder by John Lubans in 1974 appears to have been designed for the purpose of determining attitudes toward and use of that library. Responses revealed insight into users' and non-users' history of library-use instruction, attitudes toward libraries as well as self-appraisal of personal library use skills, knowledge and awareness of the library. Moreover, an attempt was made to determine perceived attitudes of faculty toward the library, from the students' viewpoint. Questions appear to have been designed with the assumption in mind that resources of the library are "valuable" to a student regardless of a student's academic discipline.

IR 006 906

Research Design

The decision to employ the survey method to conduct this research was based on the premise that attitudes toward the library are best revealed by observing behavior toward and knowledge of the library by members of the student body. It was hypothesized that strengths and weaknesses in the library system would reveal themselves in responses to questions pertaining to known availability of resources, services and facilities. In designing the instrument of measurement, effort was made to formulate questions that would reveal factors affecting use of the U.C.C.S. Library as well as use of other area libraries.

Problems with time constraints, accessibility of population, respondent cooperation and sampling errors were anticipated and determined the sampling method. Thus, students were surveyed while attending selected classes during a two-week period in the fall of 1977.

Selection of Sample

Care was taken to survey students who were representative of the total population. A desired sample size of 15% of the population of 4,100 students was determined. In order that the sample be representative of the population enrolled in the four colleges, percentages of classes and students in each college were approximated in the sample selection. Approximately 78% of the student body was enrolled in classes in the College of Letters, Arts and Sciences and the Graduate School of Public Affairs; 1/3 of the credit hours were in the Humanities, 1/3 in the Social Sciences and 1/3 in the Natural Sciences. Therefore, 78% of the classes in LAS were selected, with class size determining the selection of specific classes. Thirteen percent of the total population was enrolled in the College of Business; 13% of the Business classes with 13% of the total population enrolled in them were selected. Classes in the School of Education and College of Engineering were selected in a similar manner.[1]

Instrument Development

A survey questionnaire was designed with areas of concern in mind. Determination of information needed to fulfill the goals of this study was made and became the basis for the selection of independent variables. Questions pertaining to these

---

1. 6% of the population were enrolled in the School of Education and 4% in the College of Engineering. See Appendix A.

variables were addressed to demographic characteristics, user preferences and knowledge of the Library, frequency and ways of use. Questions designed to be used as dependent variables represented explanations for degree of library-use and knowledge, perceptions of the library and its representatives, attitudes toward library-use guidance and selected services.

A few comments pertaining to the instrument design are in order:

Because of unique characteristics of the student body, a student's age, sex, ethnic origin and employment record were not asked. (See Appendix B)

Student identification numbers were requested for the purpose of cross-checking with student numbers for students in all the classes that were surveyed.[2]

The frequency of library use scale was arbitrarily divided into two parts: values 1, 2 and 3 were placed in the high-use category; values 4 through 8 were placed in the low-user category. Six variables were created from the responses given and were coded at the end of each questionnaire. The first variable pertained to the college in which the surveyed student was enrolled. The second pertained to the time (of day) the surveyed class was held; the third variable was the degree of the student's library use. Degree of library resource knowledge (Question #8) was coded as the fourth added variable, and a comparison of the number of items checked in Question #8 with the number of items checked in Question #9 was made and coded as the fifth added variable. Given the goals of the study, it seemed important to measure the importance to the student of the library as a place to study. A variable was created pertaining to this item.

Survey Administration

In order to drastically reduce sampling error, students were surveyed during class sessions. Such a sampling technique sacrifices pure randomness for the sake of efficiency and obtaining a large sample. The most extensive sampling errors were those that resulted from student absences, students having dropped the course, and students failing to give their student numbers on the questionnaire. Survey administrators advised students not to fill out duplicate questionnaires. In spite of this advice, 12 students filled out duplicates. Of the 410 students surveyed, 23 (5%) failed to give their student numbers, thereby increasing the chance that these students may have filled out duplicates also.

---

2. A computer output with all student numbers was provided.

The sampling technique as well as an explanation of the questionnaire and purpose of the study were explained to members of the Deans' Council during a meeting held approximately six weeks prior to administering the survey. The seven librarians responsible for administering the questionnaire contacted the instructors whose classes were to be surveyed. Administrators were advised of appropriate administration techniques. Completed questionnaires were placed in manila folders labeled with pertinent information and turned over to the researcher.

Method of Analysis

Returned questionnaires were coded using 89 variables. Data was keypunched and then processed at the U.C.C.S. Computer Center using the SPSS (Statistical Package for the Social Sciences) program for data analysis.

Sample Characteristics

The selected sample numbered 619 students enrolled in 31 classes. Four hundred ten students filled out questionnaires giving a 66% return rate. One hundred ninety-two students were absent from the classes surveyed or had dropped the class. Of the 410 students, 335 (82%) were undergraduates, 75 (18%) were graduates. One hundred sixty-five students (40%) were Freshmen; 58 students (14%) were Sophomores; 54 students (13%) were Juniors, and 51 (12%) were Seniors. Sixty-seven respondents (16%) were graduates.[3]

More failures to respond to questions came from Freshmen and Graduate students then from any other class category.

Findings

The Library Survey questionnaire was composed of 23 questions. Two of those had six parts, two had 17 parts, one had 11 parts, one had eight parts and one had four parts.

Question #1 asked for the individual's Student Number. Five percent of the respondents failed to respond to this question. Questions #2 and #3 revealed the degree status of and class level achieved by the respondent.

Question #4 was designed to determine the degree of library use. Twenty-six students (6%) used the library daily; 77 (19%)

---

3. It would appear that Freshmen and Graduates were over-represented, while Sophomores, Juniors and Seniors were under-represented. This imbalance is probably due to the fact that many classes are made up of both Graduates and Undergraduates. See Appendix A.

used the library three times weekly. Ninety-five students (23%) used the library weekly. (Students in these three categories were considered to be high-users.) Sixty-one students (15%) used the library every two weeks, 69 (17%) monthly. Thirty-two (8%) used the library twice a semester, 29 (7%) less than twice a semester and 20 students (5%) never used the library.

Question #5 generated data on the types of items that would affect library use of those using the library every two weeks or less. One hundred thirty-nine students (34%) checked one of the six items; 60 (15%) checked two items. Twelve students (3%) checked three items and one student checked four items. Four students (1%) checked five items. One hundred ninety-four students (47%) used the library more than every two weeks so did not check any items.

Of the 216 students checking any of the items in Question #5, 119 (55%) checked #1, the availability of more personal time, as affecting their library use. Thirty-seven students (17%) checked the library doing a better job of meeting my needs as affecting library use. Forty-seven (21%) checked a more personal awareness of services, hours, etc. affecting library use.

Only eight students (3.7%) felt that a more helpful library staff would affect their library use. Forty respondents (18%) felt that faculty members encouraging library use and/or assigning projects that require library research would make a difference in their use of the library. Fifty-two students (24%) listed other items that would affect use.

Questions #6 and #7 yielded data on the use of other area libraries to satisfy the demands of course work. Two hundred thirty-eight students (58%) indicated that they use other area libraries for this purpose. One hundred ten students, 27% of those who indicated they used other area libraries, used one other library; 93 (23%) used two other libraries. Eight percent use three others and 1% use four other libraries.

One hundred fourteen students, 47% of those using at least one other library use the library at Colorado College; 170 students, 71% of those using at least one other library, use Penrose Public Library. Sixty-four respondents (27%) use the library at the Air Force Academy; 14 (5%) use the library on the University of Colorado campus at Boulder, and 39 students (16%) use other libraries including those in school districts, at Ft. Carson, personal collections.

Questions #8 and #9 dealt with knowledge of available resources in the library and the using of these resources. When asked what resources the student knew to be available, the following data was compiled:

Number of Students Finding Resources Available by Number of Resources

N of Students	N of Resources Found
21 (5%)	0
16 (4%)	1
29 (7%)	2
30 (7%)	3
38 (9%)	4
49(12%)	5
36 (9%)	6
39(10%)	7
38 (9%)	8
33 (8%)	9
24 (5%)	10-17

N = 410 (100%)

It was determined that items 1, 3, 4, 5, 6, and 7 in Question #8 were the most important resources available, in terms of usefulness to students. The following table summarized data collected on those items:

Number of Students Finding Selected Resources Available by Resource Title

N of Students Finding Available		
Yes	No	Resource
315(77%)	94(23%)	Material for class assignments
126(31%)	283(69%)	Interlibrary loan
234(57%)	175(43%)	Current magazines
248(61%)	161(39%)	Aid in finding information
158(39%)	251(61%)	Backfiles of magazines and periodicals in hardcopy
173(42%)	236(58%)	Backfiles of magazines and periodicals on microfilm

The following table summarizes data collected on library resources actually used by students:

Number of Students Using Resources
by Number of Resources Used

N of Students	N of Resources Used
36 (9%)	0
25 (6%)	1
34 (8%)	2
35 (9%)	3
50(12%)	4
62(15%)	5
45(11%)	6
44(11%)	7
38 (9%)	8
17 (4%)	9
8 (2%)	10
6 (1%)	11
7 (2%)	12
1 (0%)	13
1 (0%)	15
1 (0%)	17

N = 410 (100%)

The following table is a summary of data collected on items (resources) felt to be important:

Number of Students Using Six Resources
by Title of Resource

N of Students Using		Resources Used
Yes	No	
301(73%)	108(27%)	Materials for class assignments
60(15%)	349(85%)	Interlibrary loan
178(43%)	231(57%)	Current magazines
218(53%)	191(47%)	Aid in finding information
131(32%)	278(68%)	Backfiles of magazines and periodicals in hardcopy
128(31%)	281(69%)	Backfiles of magazines and periodicals on microfilm

Question #10 asked if students could use more information on library services. Two hundred eleven students (51%) answered "yes" and 168 (41%) answered "no." Twenty-seven students (7%) gave no response.

Number of Types of Information Wanted
by Number of Students Wanting Information
on Those Types

N of Information Items	N of Students Requesting	
1 item	54(23%)	
2 items	59(26%)	
3 items	51(22%)	
4 items	29(12%)	
5 items	14 (6%)	
6 items	6 (2%)	
7-11 items	13 (4%)	N = 226

When asked what specific items of information students desired, the following data was gathered:

Number of Students Wanting Information
by Title of Item

N of Students Wanting Information		Title of Item of Information
Yes	No	
34 (8%)	375(92%).....	Card catalog
99(24%)	310(76%).....	Periodicals, indexes, abstracts
64(16%)	345(84%).....	Government documents
79(19%)	330(81%).....	Reference books
67(16%)	342(84%).....	Interlibrary loan
47(12%)	362(88%).....	Reserve material
53(13%)	356(87%).....	Special collection
95(23%)	314(77%).....	Audio-visual material
56(14%)	353(86%).....	Library hours, etc.
31 (8%)	378(92%).....	Leisure reading material
27 (7%)	382(93%).....	Other

Question #12 asked students to rank, in order of importance, aspects of the Library.

Rank Ordering of Aspects*
by Aspects and Number of Students

Rank Order	Aspect	N of Students
1st place	Provides books	150(37%)
2nd place	Provides books	109(27%)
3rd place	Offers reserve reading	85(21%)
4th place	Offers reserve reading	103(25%)
5th place	Teaches how to do research	151(37%)**

*Scores represent highest numbers in the five categories.
**More students ranked this aspect as least important than any other aspect.

When students were asked which term or terms best describes or describe their perception of the role played by the U.C.C.S. librarians, 268 students (65%) responded that librarians "answered questions," 51 students (12%) responded that librarians "teach," 175 (43%) responded that librarians are "book custodians," and 36 students (9%) view librarians in "other" roles.

One hundred seventy-eight students (43%) have had in-class lectures or a class in how to do library research and found them useful; 22 students (5%) have had lectures and did not find them useful. One hundred ninety-six students (48%) have not had such lectures.

One hundred ninety-one students (47%) reported that, when professors have required library-related research work in class, they have offered helpful guidance in library use. One hundred thirty-seven students (33%) reported that such guidance was not helpful; 74 students (18%) have not been given research-type assignments.

Two hundred forty students (59%) expressed interest in taking a library-use class for credit; 154 students (38%) would not take such a course. Nine (2%) did not respond.

One hundred thirty students (32%) would take a non-credit course in library-use; 258 (63%) would not. Ten (2%) did not respond.

Two hundred forty-one students (59%) filled out questionnaires in day-time classes (8:00 AM - 5:00 PM); 168 students (41%) filled out questionnaires in evening classes.[4]

Respondents were nearly equally divided with regard to frequency of library-use. Two hundred one (49%) were "high-users," that is, they used the library at least weekly; 209 (51%) were low users, that is, they used the library every two weeks or less.

Responses to Question #8 measured students' degree of library resource knowledge, that is, the numbers of library resources students knew to be available. Sixty students (15%) had a high degree of knowledge, 134 (33%) had medium knowledge and 216 (53%) had a low degree of knowledge

When data was on the numbers of library resources known to be available and the numbers of resources respondents actually used, it was discovered that 221 respondents (54%)

---

4. This ratio corresponds precisely with the actual ratio between numbers of day-time classes and numbers of night-time classes in the total population of classes.

knew of the availability of more resources than they actually used; 134 respondents (33%) reported knowing about the same number of resources and 55 respondents (13%) reported knowing about the availability of fewer resources than they actually used. This inbalance will be discussed later on.

The researcher was interested in determining whether or not students perceived the library merely as a place to study. Data on this variable was examined. It was determined that only 73 respondents (18%) reported that the most important aspect of the library to them was the fact that it provided a study area for them. One hundred thirty-seven respondents (82%) did not view this aspect as the most important to them.

Several variables were cross-tabulated with the variable Class Level attained, revealing several significant measures of association. The following tables summarize these findings:

Class Level Attained
by
Selected Variables and Frequency of Responses

Class	Variables	Frequencies
Freshman	Number of items that would affect library use	*no item - 75(45%)
		1 item - 62(38%)
		2 items - 20(12%)
		3 items - 4 (2%)
		5 items - 3 (2%)
Sophomore	.....	no item - 28(48%)
		1 item - 17(29%)
		2 items - 12(21%)
		3 items - 1 (2%)
Junior	.....	no item - 32(59%)
		1 item - 14(26%)
		2 items - 2 (4%)
		3 items - 5 (9%)
Senior	.....	no item - 26(51%)
		1 item - 16(31%)
		2 items - 8(16%)
		3 items - 1 (2%)
Graduate	.....	no item - 24(36%)
		* 1 item - 27(40%)
		* 2 items - 15(22%)
		3 items - 1 (1%)

*Indicates highest frequencies

Class	Variables	Frequencies
Freshman	Degree of Use	High - 75(46%); Low - 90(54%)
Sophomore	.....	High - 30(53%); Low - 27(47%)
Junior	.....	*High - 33(61%); Low - 21(39%)
Senior	.....	High - 29(57%); Low - 22(43%)
Graduate	.....	High - 25(37%); *Low -*42(63%)

Freshman	Degree of library knowledge	Hi - 18(11%);Med - 44(27%);Low - 103(62%)
Sophomore	.....	Hi - 5 (9%);Med - 24(42%);Low - 28(49%)
Junior	.....	Hi - 10(18%);Med - 25(46%);Low - 19(35%)
Senior	.....	Hi - 10(20%);Med - 15(29%);Low - 26(51%)
Graduate	.....	*Hi - 14(21%);Med - 22(33%);Low - 31(46%)

Summary:
Highest users - Seniors and Graduates; Medium users - Juniors; Low users - Freshman

Freshman	Comparison of numbers of items checked in #8 with #9	More in 8 than 9 - 79(48%) Less in 8 than 9 - 18(11%) Same for both - 68(41%)
Sophomore	.....	More in 8 than 9 - 33(58%) Less in 8 than 9 - 11(19%) Same for both - 13(23%)
Junior	.....	More in 8 than 9 - 32(59%) Less in 8 than 9 - 6(11%) Same for both - 16(30%)
Senior	.....	More in 8 than 9 - 29(57%) Less in 8 than 9 - 12(24%) Same for both - 10(20%)
Graduate	.....	*More in 8 than 9 - 41(61%) *Less in 8 than 9 - 4 (6%) Same for both - 22(33%)

Summary:
More seniors checked using more items than they know to be available

*Indicates highest frequencies

Class	Variables	Frequencies
Freshman	Numbers of other area libraries used	None - 67(41%) * 1 - 57(35%) 2 - 34(21%) 3 - 5 (3%)
Sophomore	.....	*None - 26(45%) 1 - 14(24%) 2 - 9(16%) 3 - 9(16%)
Junior	.....	None - 21(39%) 1 - 11(20%) 2 - 18(33%) 3 - 3 (5%)
Senior	.....	None - 22(42%) 1 - 9(18%) 2 - 9(18%) * 3 - 10(19%)
Graduate	.....	None - 28(42%) 1 - 14(21%) * 2 - 19(28%) 3 - 6 (9%)

Summary:
More Freshman, Sophomores use one other; Juniors and Graduates use two others; Seniors use three others

---

Freshman	Number of library resources actually used	* None - 16(10%) 1 - 17(10%) 2&3 - 35(21%) 4-7 - 78(47%) 8-12 - 18(11%) 13-17 - 1
Sophomore	.....	None - 4 (7%) 1-3 - 9(15%) * 4-7 - 35(60%) 8-12 - 10(22%) 13-17 - 0
Junior	.....	None - 5 (9%) 1-3 - 7(13%) 4-7 - 24(44%) * 8-12 - 17(33%) 13-17 - 1

*Indicates highest frequency

Class	Variables	Frequencies
Senior	Number of library resources actually used	None - 4 (8%) 1-3 - 10(20%) 4-7 - 24(48%) 8-12 - 13(26%) 13-17 - 0
Graduate		None - 5 (8%) * 1-3 - 16(24%) 4-7 - 28(42%) * 8-12 - 18(28%)

Summary:
More Sophomores use 4-7; Freshmen, Graduates use 8-12

Freshman	Numbers of items of information student would like	None - 74(45%) 1-3 - 61(37%) * 4-7 - 28(17%) 8-11 - 2 (1%)
Sophomore		None - 28(48%) 1-3 - 25(44%) 4-7 - 5 (9%) 8-11 - 0
Junior		None - 18(33%) * 1-3 - 27(46%) 4-7 - 10(19%) 8-11 - 1 (2%)
Senior		None - 21(40%) 1-3 - 21(40%) 4-7 - 7(14%) * 8-11 - 3 (6%)
Graduate		* None - 36(53%) 1-3 - 25(37%) 4-7 - 6 (9%) 8-11 - 0

Summary:
Graduates want no information; Juniors 1-3 items; Freshman 4-7; Seniors 8-11 items of information

*Indicates highest frequency

Class	Variables	Frequencies
Freshman	Desire for credit class in library use	*Yes - 107(65%) No - 51(31%)
Sophomore	.....	Yes - 34(59%) No - 21(36%)
Junior	.....	Yes - 34(63%) No - 19(35%)
Senior	.....	Yes - 23(45%) * No - 28(55%)
Graduate	.....	Yes - 34(51%) No - 29(43%)

Summary:
More Freshmen want a credit class; more Graduates do not

Freshman	Desire for no-credit course	Yes - 50(30%) No - 104(63%)
Sophomore	.....	Yes - 22(38%) No - 33(57%)
Junior	.....	*Yes - 21(39%) No - 32(59%)
Senior	.....	Yes - 14(28%) * No - 36(71%)
Graduate	.....	Yes - 20(30%) No - 42(63%)

Freshman	Knows of availability of materials for class assignments	Yes - 114(69%) * No - 51(31%)
Sophomore	.....	Yes - 46(79%) No - 12(21%)
Junior	.....	Yes - 45(83%) No - 9(17%)
Senior	.....	*Yes - 42(84%) No - 8(16%)
Graduate	.....	*Yes - 56(84%) No - 11(16%)

Summary:
More Freshmen know about it

*Indicates highest frequency

Class	Variables	Frequencies
Freshman	Knows interlibrary loan is available	Yes - 32(19%) * No - 133(80%)
Sophomore		Yes - 21(36%) No - 37(64%)
Junior		*Yes - 22(41%) No - 32(59%)
Senior		Yes - 19(38%) No - 31(62%)
Graduate		Yes - 27(40%) No - 40(60%)

Summary:
More Juniors and Graduates know about it

Freshman	Knows current magazines are available	Yes - 83(50%) * No - 82(49%)
Sophomore		Yes - 35(60%) No - 23(40%)
Junior		Yes - 32(59%) No - 22(41%)
Senior		*Yes - 33(66%) No - 17(34%)
Graduate		Yes - 41(61%) No - 26(39%)

Freshman	Knows aid in finding information is available	Yes - 91(55%) * No - 74(45%)
Sophomore		Yes - 37(64%) No - 21(36%)
Junior		Yes - 37(68%) No - 17(32%)
Senior		Yes - 27(54%) * No - 23(46%)
Graduate		*Yes - 51(76%) No - 16(24%)

*Indicates highest frequency

Class	Variables	Frequencies
Freshman	Knows backfiles of magazines and periodicals in hard copy are available	Yes - 52(31%) * No - 113(68%)
Sophomore		Yes - 27(47%) No - 31(53%)
Junior		*Yes - 27(50%) No - 27(50%)
Senior		Yes - 19(38%) No - 31(62%)
Graduate		Yes - 31(46%) No - 36(54%)
Freshman	Knows backfiles of magazines and periodicals on microfilm are available	Yes - 47(28%) * No - 118(71%)
Sophomore		Yes - 26(45%) No - 32(55%)
Junior		*Yes - 32(59%) No - 22(41%)
Senior		Yes - 25(50%) No - 25(50%)
Graduate		Yes - 36(54%) No - 31(46%)
Freshman	Uses material for class assignments	Yes - 110(66%) * No - 55(33%)
Sophmore		Yes - 41(71%) No - 17(29%)
Junior		Yes - 42(78%) No - 12(22%)
Senior		Yes - 38(76%) No - 12(24%)
Graduate		*Yes - 58(87%) No - 9(13%)

Summary:
Graduates use this most

*Indicates highest frequency

Class	Variables	Frequencies
Freshman	Uses Interlibrary Loan	Yes - 12(7%) * No - 153(92%)
Sophomore	.....	Yes - 9(16%) No - 49(84%)
Junior	.....	*Yes - 13(24%) No - 41(76%)
Senior	.....	*Yes - 12(24%) No - 38(76%)
Graduate	.....	Yes - 10(15%) No - 57(85%)

Summary:
Seniors use this

Freshman	Uses current magazines	Yes - 59(36%) * No - 106(64%)
Sophomore	.....	Yes - 27(47%) No - 31(53%)
Junior	.....	*Yes - 28(52%) No - 26(48%)
Senior	.....	Yes - 22(44%) No - 28(56%)
Graduate	.....	Yes - 33(49%) No - 34(51%)

Freshman	Uses aid to find information	Yes - 88(53%) No - 77(46%)
Sophomore	.....	Yes - 31(53%) No - 27(47%)
Junior	.....	Yes - 30(56%) No - 24(44%)
Senior	.....	Yes - 26(52%) * No - 24(48%)
Graduate	.....	*Yes - 39(58%) No - 28(42%)

---

*Indicates highest frequency

Class	Variables	Frequencies
Freshman	Uses backfiles of magazines and periodicals in hard copy	Yes - 45(27%) * No - 120(72%)
Sophomore	.....	Yes - 20(35%) No - 38(65%)
Junior	.....	*Yes - 23(43%) No - 31(57%)
Senior	.....	Yes - 16(32%) No - 34(68%)
Graduate	.....	Yes - 24(36%) No - 43(64%)
Freshman	Uses backfiles of magazines and periodicals on microfilm	Yes - 30(18%) * No - 135(81%)
Sophomore	.....	Yes - 18(31%) No - 40(69%)
Junior	.....	Yes - 23(43%) No - 31(57%)
Senior	.....	Yes - 20(40%) No - 30(60%)
Graduate	.....	*Yes - 30(45%) No - 37(55%)

*Indicates highest frequency

In an effort to discover cause-and-effect relationships, several key variables were cross-tabulated. Relationships between degree of library use and use of other libraries, knowledge of library resources, factors that would affect library-use, degree status and the library's "image" were examined. Findings pertinent to this study are reported below.

Use of Library Resources

As expected, low users (those using the library every two weeks or less) had a low degree of knowledge of library resources; that is, out of the 17 resources and services listed on the

questionnaire, low-users knew about the availability of four to eight items. High-users reported knowing about the availability of five to nine items, a low-medium degree of knowledge. This finding raised the question as to whether or not high-users use the library mainly as a study area and not as a place to use resources. Twenty-three per cent of the high-users reported seeing the library as a study area; 77% reported not seeing the library for this purpose. Both high- and low-users ranked the "library providing books" as the most important aspect to them. The second most important aspect to high-users was "providing a study area;" to low-users, "offers aid in searching information." In third place, for high-users, was "offering reserve reading material;" for low-users, were both "offering reserve material" and "providing study area." In fourth place, high-users and low-users placed "offers aid in searching information." "Teaches how to do research" ranked fifth with both types of users.

Both undergraduates and graduates ranked provides books and offers aid in searching information in first place. Undergraduates ranked provides study area in second place, offers reserve reading in fourth place, and teaches how to do research in fifth place. Graduates ranked offers reserve reading in third place, how to do research in fourth and provides study area in fifth place.

The majority of high-to-medium library users are undergraduates in LAS classes; Business undergraduates are low-users as are Engineering undergraduates. Education undergraduates are high-users.

Graduates in LAS classes are high-users. There are a few more low-users than high-users among Business and Education graduates.

Students using the library monthly or more found that, when professors gave library-related research assignments, their library use guidance was helpful. Those who used the library twice a semester or less did not find guidance helpful.

There are fewer high-users in evening classes than in morning or afternoon classes. The highest users are in morning classes. There are more low-users in evening classes. The availability of more personal time would make no difference in library-use to those in classes during all time periods, although those in evening classes reported more frequently than those in classes in other time periods that this factor would make a difference. In all time periods, the library better meeting needs, a more helpful staff and the faculty encouraging library-use would make no difference in library-use although the least difference between "yes" and "no" scores falls with individuals using the library twice a semester. Even so, a larger percentage of low-users than high-users checked more items out of the six having to do with factors that would affect library-use.

The highest users were LAS undergraduates and graduates who were surveyed in evening classes. The lowest users were undergraduates in Engineering and Business classes. Low-users in LAS and Business classes believe that the availability of more personal time would make a difference in their library use.

Students were asked if there were library services about which they wanted more information. High-users reported wanting more information on an average of seven items; low-users the same. Graduates, on the whole, did not want information on any items. Freshmen wanting more information on items, wanted one item; Sophomores, Juniors and Graduates wanted information on two items. Seniors wanted information on three items.

Use of Specific Library Resources

Undergraduates use six library resources out of 17 more frequently than other degree categories; Graduate Special students use five items more frequently. Graduates use seven and eight resources more frequently than do students in any other degree category. Seventy-three per cent of the respondents reported using materials for class assignments. Eighty-five per cent reported not using interlibrary loan. Forty-three per cent reported using current magazines. Fifty-three per cent use aid in finding information. Sixty-eight per cent do not use backfiles in hardcopy; 68% do not use backfiles on microfilm.

Students in all colleges do not use interlibrary loan, hardcopy or microfilm. Students in all colleges use material for class assignments. The highest percentage of students using current magazines are Business students; students in all colleges except Engineering use aid in finding information.

Librarian Roles

Students were asked to describe their perceptions of the role of librarians at U.C.C.S. Although a higher percentage of low-users than high-users perceived that the librarians answer questions, a high percent of high-users also perceive this to be a role. Neither high- nor low-users perceived that librarians teach. The same is true for librarians perceived as book custodians, although more checked this item as a role than "teach," and although there were more low-users than high-users checking this item. More low-users than high-users checked "other" as a role librarians assume.

Graduates perceive librarians as question-answerers as do undergraduates. Undergraduates also see librarians as teachers. Graduates perceive them as book custodians and Undergraduate Special students see them in other roles.

Use of Other Area Libraries

The relationship among students' perception of the library better meeting needs, use of the libraries at C.C. and the AFA, and whether or not students used materials for class assignments, hardcopy material and microfilm, warrants examination. Of those students who do not feel meeting needs would affect library use and who do not use the C.C. library, more do not use material for class assignments than those who do. Those who do not feel meeting needs would affect library-use and who do not use the C.C. library, also do not use hard-copy, although nearly as many of this group use the C.C. library as those who do not use it.

Those students who use backfiles of magazines and periodicals on microfilm, use the library at C.C. and feel the U.C.C.S. library better meeting needs would make a difference in library use. Those not using microfilm here, do not use C.C. or feel library better meeting needs would make a difference.

High-users of the U.C.C.S. library use at least one other area library frequently, low-users use at least two other libraries more frequently than do high-users. Undergraduates use at least one other library and graduates use two other libraries more frequently than do undergraduates. Graduates use the C.C. library. Penrose Public Library was the most "popular" other library used. High-user Freshmen and Seniors also use C.C., but twice as many low-users in these class categories do not use C.C. Low-user Sophomores and Graduates use the C.C. library.

More LAS students do not use C.C. library than do; Business students do not use C.C. The same number of Education students use and do not use the library at C.C. The availability of more personal time would not affect the library use of any of these students.

Students wanting information on reference books but feel library better meeting needs would not make a difference do not use the C.C. library; students not wanting this information do not use C.C. but feel that the library better meeting needs would make a difference in library use. The same is true for those not wanting information on interlibrary loan, reserve material and special collections. Students wanting special collections information also use the C.C. library.

Students wanting information on periodicals, indexes and abstracts do not use C.C. and feel somewhat that the library better meeting needs would make a difference in library use. Students not wanting this information feel meeting needs would make a difference. Students who want information on government documents use the C.C. library and feel library better meeting needs would make a difference. The same is true for those not wanting this information except that these students do not use the C.C. library.

Those wanting information on periodicals, indexes and abstracts, and who feel meeting needs would make a difference use the library at the AFA. Those who do not want information on interlibrary loan and special collections, feel meeting needs would make a difference and use the AFA library. The same is true for wanting information on reference books and reserve material except that these students do not use the AFA library. Students wanting information on government documents use and do not use that library with the same degree of frequency.

More Seniors than any other class category want to have more information on the card catalog, periodicals, indexes and abstracts, government documents, reference books, interlibrary loan, special collections, hours library is open. More Freshmen than any other class category want more information about reserve material. More Juniors than any other class category want information on audio-visual material and leisure reading material. Sophomores want more information on other items.

A larger per cent of high-users than low-users would like a credit class in library use. A majority of both types of users did not want a no-credit class. A higher percentage of graduates than undergraduates checked at least one item that would affect their library use. The availability of more personal time affecting library use was checked by more Freshmen than any other class category; more Juniors than any other class category check "no" for this item. Sophomores checked library better meeting my needs as affecting library use more than any other class; graduates checked "no" for this item. More personal awareness of services, hours as affecting library use was checked by more graduates than any other class category; Juniors said "no" to this item. The highest percentage checking "yes" to a more helpful library staff were Freshmen, although students in all class categories checked "no" frequently. More Juniors than any other class category reported that their library use would be affected by faculty members encouraging library use and/or giving assignments that required library research; Seniors said this would make no difference. The largest percentage of low-users are graduates; Freshmen are the next category of low-users. The highest users are Juniors; the next highest are Seniors.

Knowledge of Library Resources

Students who have a medium degree of knowledge of availability of library resources, that is, those who know about the availability of between six and eight items, do not regard the library solely as a place to study. Those who know about the availability of fewer items (a low degree of knowledge) do regard it solely as a place to study.

Students who perceive librarians in the role of answering questions, know about the availability of ten library resources; those who do not, know about seven items. If librarians are perceived as teachers, students are aware of the availability of four items; if not, two items. Students know about the availability of 11 items if they perceive librarians as book custodians; three items, if they do not. Librarians are seen in other roles if students know about five items, they are not, if students know about eight items.

A majority of the LAS students with a high degree of knowledge of resource availability are in morning and afternoon classes. A majority of the Engineering students in a morning class have a medium degree of library resource knowledge. Students in evening LAS classes have a low degree of resource knowledge; Business students have a high degree of resource knowledge and Education students a medium degree.

Students with a high degree of knowledge of available resources would like a credit class in library-use; those with a high and medium degree of such knowledge want a no-credit class.

Undergraduates have a medium degree of knowledge as to available resources; Graduates have a low degree.

Students enrolled in classes taught in the four colleges know about the availability of materials for class assignments. A very low percentage of students in all classes know about interlibrary loan and backfiles of magazines and periodicals in hardcopy. A high percentage of students in all classes know that current magazines are available. Students in all classes except Engineering classes know that aid in finding information is available. A high percentage of Business students know about the availability of microfilm materials; students in other classes do not, in general.

Students who know about the availability of material for class assignments did not feel, in the main, that faculty encouraging library-use would make a difference in their library use.

Students who regard the library first and foremost as a study area know about the availability of five library resources; students who do not regard the library as such know about the availability of seven items.

A majority of students who wanted more information on various library resources have knowledge of eight library items; those who do not want more information, know that five items are available. More students wanted information on two library resources than any other number. Those students who use five library resources want information on one and two

library resources; students using four resources, want information on three resources. Those using five and six resources want information on six resources; those using seven, want information on four items. The same number of students wanting information on five items, use between five and eight library resources.

In general, undergraduates want information, on an average, about 3.5 items; graduates would like information, on the average, about 4.3 items.

Summary and Comments

This study constitutes an attempt to provide useful baseline data from which the Library Director can draw conclusions about student personal and attitudinal characteristics and their effects on library use. Data have produced several generalized statements and assumptions regarding the relationship between the student body and the Library.

Given the general nature of the findings, it would appear that degree of library use, use of other area libraries, knowledge of available resources, perceptions of the library and its staff, may very well be based upon conditions exogenous to the U.C.C.S. Library system. It has been argued that attitudes toward libraries in general are often a product of an individual's social conditioning, habits, and the influence exerted from a variety of areas within an individual's environment.

Students' responses may have been based upon the desire to give "socially acceptable" answers, wanting to "play the game" for a variety of reasons, and/or wanting to "beat the system." Doubt in the validity of responses, therefore, may lie in these factors as well as in others. One of the factors may have been apathy, even hostility, toward questionnaires and surveys. In many instances, questionnaires were filled out prior to a professor's lecture. Thus, a student upon entering class fully prepared for a lecture, may have been annoyed at having to fill out a questionnaire, the nature of which was unrelated to class. On the other hand, respondents filling out a questionnaire at the end of a class period, may have been so "burned-out" that they had little attention to give to the questionnaire.

It has been shown that there can be a difference between what a library user <u>says</u> he uses and what the user <u>actually</u> uses. Even if an individual reports using a library resource, the question needs to be asked "how is <u>use</u> measured?" For example, does the student check out a book only to have it sit, un-opened, until time to return it? Does a student who "uses" materials for class assignments merely glance at indexes in that material?

Moreover, there is very little evidence to support the premise that attitudes affect behavior significantly. There is some doubt, for example, that frequent library users would necessarily regard the library favorably and/or perceive it as meeting all expectations and needs. The fact that more high-users than low-users wanted a (credit) class in library-use bears this out.

Appendix A

Classes Surveyed by College and Enrollment

Classes	College	Enrollment	No. of Respondents	Difference
LCHEM 318(E)	LAS	16	10	- 6
LBIO 302-2(D)	LAS	19	14	- 5
LECN 201(D)	LAS	34	22	-12
LENG 205(E)	LAS	18	9	- 9
LENG 235(E)	LAS	20	12	- 8
FAH 478(D)	LAS	13	8	- 5
*LGES 199(D)	LAS	46	34	-12
*LSOC 222(D)	LAS			
LHY 471/571(D)	LAS	18	7	-11
LHY 444/544(D)	LAS	21	13	- 8
LMATH 133-2(D)	LAS	28	24	- 4
LPHL 335-1(D)	LAS	16	11	- 5
LPSY 210(D)	LAS	38	19	-19
LPSY 420(D)	LAS	31	23	- 8
LPSC 421(D)	LAS	12	10	- 2
LPSC 426-3(D)	LAS	12	9	- 3
PAD 623(E)	LAS	12	8	- 4
LPHY 105(D)	LAS	25	17	- 8
LSOC 341(D)	LAS	14	10	- 4
LSCC 112(D)	LAS	24	19	- 5
LSOC 515(E)	LAS	10	5	- 5
LSPN 211(D)	LAS	10	8	- 2
LSPN 301(E)	LAS	11	9	- 2
N = 23		N = 448	N = 301	Difference = -147

144 respondents (49%) were Freshmen, 46 (16%) were Sophomores, 34 (12%) were Juniors, 34 (12%) were Seniors, and 24 (36%) were Graduate Students

D = day-time class; E = evening class

*The survey administrator combined the questionnaires from these classes in one envelope.

Classes Surveyed by College and Enrollment

Classes	College	Enrollment	No. of Respondents	Difference
BAD 615(E)	Business	10	8	- 2
MK 420/520(E)	Business	22	14	- 8
MK 350(E)	Business	32	28	- 4
ORMG 330(E)	Business	32	25	- 7
N = 4		N = 96	N = 75	Difference = -21

16 respondents (24%) were Freshmen, 6 (11%) Sophomores, 16 (30%) Juniors and 10 (20%) Seniors, 16 (24%) were graduates

TED 457(E)	Education	22	4	-18
RED 511(E)	Education	18	12	- 6
ELED 532(E)	Education	16	16	0
N = 3		N = 56	N = 32	Difference = -24

4 respondents (12%) were Freshman, 1 (3%) Sophomores, 1 (3%) Juniors, 1 (3%) Seniors and 27 (80%) were graduates

EENG 381(D)	Engineering	19	14	- 5
N = 1		N = 19	N = 14	Difference = -5

1 respondent (7%) was a Freshman, 4 (27%) Sophomores, 3 (20%) Juniors, 6 (12%) Seniors and no graduates

Student Enrollment by Class
Fall 1977

Class	Enrollment (in%)
Freshman	.3061
Sophomore	.2198
Junior	.1775
Senior	.1387
Graduate	.1579

Respondents by College

No. of Respondents	College
295(72%)	LAS and Graduate School of Public Affairs
66(16%)	Business
34(8%)	Education
15(4%)	Engineering

Appendix B

In order to check the assumption that graduate students in Education made very little difference in the outcome of the survey, data was examined on this population:

Number of Graduate Education Students Finding Six Resources by Title of Resources

No. of Students		Resource	% of Total Respondents Checking	
Yes	No		Yes	No
22(82%)	*5(18%)	Material for class assignments	5%	5%
9(33%)	18(67%)	Interlibrary loan	7%	6%
14(52%)	13(48%)	Current magazines	5%	7%
19(70%)	8(30%)	Aid in finding information	7%	4%
11(40%)	16(60%)	Backfiles of magazines and periodicals in hardcopy	6%	6%
13(48%)	14(52%)	Backfiles of magazines and periodicals on microfilm	7%	5%

*These percentages represent % of Graduate Education Student population

Number of Graduate Education Students Using Six Resources by Title of Resources

No. of Students		Resource	% of Total Respondents	
Yes	No		Yes	No
23(85%)	4(15%)	Material for class assignments	7%	3%
3(11%)	24(89%)	Interlibrary loan	5%	6%
12(45%)	15(55%)	Current magazines	6%	6%
14(52%)	13(48%)	Aid in finding information	6%	6%
7(26%)	20(74%)	Backfiles of magazines and periodicals in hardcopy	5%	7%
10(37%)	17(63%)	Backfiles of magazines and periodicals on microfilm	7%	6%

Number of Graduate Education Students
Desiring More Information
by Type of Information

No. of Students		Type of Information	% of Total Respondents	
Yes	No		Yes	No
2(7%)	25(93%)	Card catalog	5%	6%
5(19%)	22(81%)	Periodicals, indexes, abstracts	5%	7%
4(15%)	23(85%)	Government documents	6%	6%
3(11%)	24(89%)	Reference books	3%	7%
3(11%)	24(89%)	Interlibrary loan	4%	7%
3(11%)	24(89%)	Reserve material	6%	6%
3(11%)	24(89%)	Special collection	5%	6%
6(22%)	21(78%)	Audio visual	6%	6%
3(11%)	24(89%)	Hours library is open	5%	6%
0(0%)	27(100%)	Leisure reading	0%	7%
1(3%)	26(97%)	Other types of information.	0%	6%

Data was gathered on how Graduate Education Students view the library.

Ranking of Important Library
Aspects by Graduate Education Students
by Aspects

Ranking	Provides Books	Offers aid in searching information	Teaches how to do research	Provides study area	Offers reserve reading material
1st place	8(30%)			1(4%)	1(4%)
2nd place	7(26%)	13(48%)	6(22%)		5(19%)
3rd place	5(19%)	4(15%)	2(7%)	3(11%)	8(30%)
4th place	2(7%)	4(15%)	5(19%)	6(22%)	7(26%)
5th place	0(0%)	1(4%)	8(30%)	11(41%)	2(7%)

Most important is Provides Books, Offers Aid

When Graduate Education Students were asked if they would take a library-use course for credit, 16 students (59%) indicated they would, 7 students (26%) indicated they would not, and 3 students (11%) said their answer would be dependent upon certain factors (e.g., time of day course is offered). When asked if they would take a non-credit course, 9 students (33%) said "yes," 13 students (48%) said "no," and 3 (11%) made their answers dependent upon certain conditions.

Appendix C

Profiles on Various Populations*

Population	Characterizing Variables
High-users (those using library at least weekly)	1. Know about the availability of 5 to 9 library resouces; $\bar{x}$ = 7 (low-medium "knowledge") 2. Most important library aspect: "library provides books" 2nd: "provides study area" 3rd: "offers reserve reading" 4th: "offers aid in searching" 5th: "teaches how to do research" 3. Are undergraduates in LAS classes, evening. 4. Highest users are in morning classes. 5. Use at least one other area library. 6. Would like a credit course in library use.
Low-users (those who use library every two weeks or less)	1. Know about the availability of 4 to 8 library resources; $\bar{x}$ = 6. 2. Most important library aspect: "library provides books" 2nd: "offers aid in searching" 3rd: "provides study area" 4th: "offers reserve reading" 5th: "teaches how to do research" 3. Are in evening classes. 4. Checked more items that would affect library use than high-users. 5. Perceived librarians as "answering questions" slightly more frequently than high-users. Also, "other" role. 6. More frequently checked librarians role as "book custodians." 7. Use at least two other area libraries. 8. Are graduates.

*The variables in each population represent the highest scores in percent within categories.

Population	Characterizing Variables
Those feeling that "library better meeting needs" would make a difference in library use	1. Do not use Colorado College library. 2. Do not want information on: reference books, interlibrary loan, reserve material, periodicals, indexes and abstracts. 3. Want information on government documents. 4. Want information on periodicals, indexes, abstracts, interlibrary loan, special collection.
Those wanting information on: special collection	1. Use Colorado College library and Air Force Academy library.
Those wanting information on: government documents	1. Use Colorado College library.
Those wanting information on: periodicals, indexes and abstracts	1. Use Air Force Academy library.
Those wanting information on: interlibrary loan	1. Use Air Force Academy library.
Those wanting more information	1. Have medium degree of resource knowledge. 2. Have knowledge of two library resources.
Freshman	1. High users use Colorado College library 2. Want information on reserve material. 3. Availability of more personal time would make a difference in library use; a more helpful library staff.
Sophomore	1. Low users use Colorado College library. 2. Want information on "other" items. 3. Library better meeting needs would make a difference.

Population	Characterizing Variables
Junior	1. Want information on audio-visual, leisure reading material. 2. Faculty encouraging use would affect use. 3. Are the highest users.
Senior	1. High users use Colorado College library. 2. Want information on card catalog, periodicals, indexes, abstracts, government documents, reference books, interlibrary loan, special collection, library hours.
Graduate	1. Low users use Colorado College library. 2. More personal awareness of library services, hours would make a difference.
Undergraduates	1. Ranking of library aspects: 1st: "provides books" "offers aid in searching information" 2nd: "provides study area" 4th: "offers reserve reading" 5th: "teaches how to do research" 2. Higher percentage use between one and six resources. 3. Librarians are "teachers," "question answerers." 4. Use one other area library. 5. Have a medium degree of knowledge of available library resources. 6. Want more information on 3.5 library resources.
Graduate	1. Ranking of library aspects: 1st: "provides books" "offers aid in searching information" 3rd: "offers reserve reading 4th: "teaches how to do research" 5th: "provides study area

Population	Characterizing Variables
Graduate (cont'd)	2. Higher percentage use between 7 and 11 library resources. 3. Librarians are "question answerers," "book custodians." 4. Use two other area libraries. 5. Have a low degree of knowledge of available library resources. 6. Want more information on 4.3 library resources.
LAS Students - Undergraduates	1. Are high-to-medium library users. 2. Low-users believe availability of more personal time would make a difference in library use. 3. Do not use interlibrary loan, hard-copy, microfilm. 4. Know material for class assignments is available, current magazines, aid in finding information.
LAS Students - Graduates	1. Are high users. 2. Do not use interlibrary loan, hard-copy, microfilm. 3. Know material for class assignments is available, current magazines, aid in finding information.
Business Students - Undergraduates	1. Are low-users. 2. Low-users believe availability of more personal time would make a difference in library use. 3. Do not use interlibrary loan, hard-copy, microfilm. 4. Largest users of current magazines. 5. Both have high-degree of knowledge of library resources available. 6. Know that material for class assignments is available, current magazines, aid in finding information and microfilm.

Population	Characterizing Variables
Business Students - Graduates	1. Are low-users to a slight extent. 2. Do not use interlibrary loan, hard-copy, microfilm. 3. Use material for class assignments. 4. Have high degree of knowledge of library resources. 5. Know that material for class assignments, current magazines, aid in finding information and microfilm are available.
Education Students - Undergraduates	1. Are high-users. 2. Do not use interlibrary loan, hard-copy, microfilm. 3. Use material for class assignments. 4. Have a medium degree of knowledge of available resources.
Education Students - Graduates	See Appendix B.
Engineering Students - Undergraduates	1. Are low-users. 2. Do not use interlibrary loan, hard-copy, microfilm, aid in finding information. 3. Use material for class assignments.
Those with high degree of knowledge of resources available (11-17 items)	1. Do not regard library as a place to study. 2. LAS students are in morning and afternoon classes. 3. Would like credit class in library use.
Those with medium degree of knowledge of resources available (7-10 items)	1. Perceive librarians as ones who "answer questions," "book custodians." 2. Engineering students are in morning classes.

Population	Characterizing Variables
Those with low degree of knowledge of resources available (0-6 items)	1. Regard it solely as a place to study. 2. Librarians are perceived as "teachers," "other" roles. 3. LAS students are in evening classes.

Appendix D

Some Interesting Relationships

Only 23% of the high-users (those who used the library at least weekly) reporting knowing about the availability of five to nine library resources, perceived the library as, first and foremost, a study area. This low-to-medium degree of library resources knowledge may be due, in part, to the fact that high-users perceive the library, first and foremost, as a facility that "provides books." These students very well may use the library frequently but only to use books (and perhaps several other items, but fewer than nine), resulting in a low-medium degree of library knowledge.

Students who do not use material for class assignments, hardcopy material or material on microfilm in the U.C.C.S. Library, generally are not users of the library at Colorado College nor do they feel that the U.C.C.S. Library better meeting needs is a factor that would affect library use. The researcher feels the basis for these findings may be a general feeling of indifference to libraries on the part of students. Further, students who do use microfilm at the U.C.C.S. Library, want more information on government documents, use the Colorado College library and feel that meeting needs would make a difference in library use. Those using the special collection here also use Colorado College but do not feel meeting needs would make a difference.

It may be that those who do not regard the library solely as a study area have more knowledge of library resources than those who do regard the library as such, because they do more than study in the library, e.g. they avail themselves of resources.

Helpful guidance from professors in doing library-related research may have had an impact on students' frequency of library use since higher users reported more frequently than lower users that professors' guidance was helpful.

Both high and low-users want more information on 3.5 library resources. There could be several explanations for this finding. One may be that users are "comfortable" with their relationship to the library as it now stands.

One would assume that those with a low degree of knowledge as to available library resources would want more information about more library resources than those with a higher degree of library resource knowledge. Such is not the case, however. Since those with low library resource knowledge generally do not want

more information, it is assumed that these respondents were responding to the types of information. With the exception of one or two items, all the library resource items were different than the types of items listed in the library-knowledge question.

One other finding is particularly interesting; that is the relationship between the number of library resources about which students wanted more information and the number of resources students actually used. Students using four resources want information on three resources, those using five resources want information on one and two items. Those using six resources want information on six items, those using seven resources want information on four items. Since it is not often the case that those using more resources want fewer items of information, one may assume, as above, that students are responding to the fact that the list of resources in the "type of information" question is different from the list in the "library resource knowledge question."

Appendix E

Class Level Attained by Characteristics

Class	Characteristics*
Freshmen	1. No number of items would affect library use.
	2. Are low-users (every two weeks or less) and have low knowledge of availability of library resources.
	3. Know about more resources than they actually use.
	4. Do not use other area libraries (highest score). High-users have the highest score of all classes for using Colorado College library. Low-users have lowest score for using Colorado College library. Do not use library at the Air Force Academy--equal scores for high and low-users. High-users use Boulder Library.
	5. Have highest score both for regarding library as a study area and not regarding it as such.
	6. Do not desire information on library resources.
	7. Desire credit class in library use.
	8. Know about availability of: material for class assignments, current magazines, aid in finding information. Have highest score for not knowing about availability of class assignment material, interlibrary loan.
	9. Actually use: material for class assignments (lowest score for not using), aid in finding information. Highest score for not using microfilm.

*Variables represent the highest percentage scores among the total population (class)

Class	Characteristics*
Sophomore	1. No number of items would affect library use.
	2. More are high-users than low-users.
	3. Have low degree of library resource knowledge.
	4. Use no other area libraries. Have highest score of all classes for using three other libraries.
	5. More low-users using U.C.C.S. also use Colorado College library.
	6. More high-users (highest score of all classes) use Air Force Academy library.
	7. Actually use between 4 and 7 library resources--highest score for use of this many.
	8. Use: material for class assignments, aid in finding information.
	9. Know about availability of current magazines.
	10. Want credit course in library use.
	11. Do not want more information on library resources.
	12. Do not regard library solely as a study area.
Junior	1. No number of items would affect library use.
	2. Have the highest score for high-users.
	3. Are medium-users of U.C.C.S. library.
	4. Use no other area libraries; also two others.
	5. Nearly equally divided among high-users using (15%) and not using (17%) Colorado College library.
	6. High-users use Air Force Academy library.
	7. Use between 4 and 7 resources.
	8. Know about: material for class assignments.

*Variables represent the highest percentage scores among the total population (class)

Class	Characteristics*
Junior (cont'd)	9. Do not know about availability of interlibrary loan, but have the highest score of all classes for knowing about its availability.
	10. Use material for class assignments; do not use interlibrary loan.
	11. Desire credit course in library use. Have highest score of all classes for desiring no-credit class in library use.
	12. Do not regard library solely as a study area.
Senior	1. No number of items would affect library use.
	2. Are high-users but less so than Juniors.
	3. Have low knowledge of availability of library resources--lower than Freshmen; second lowest to Graduates.
	4. A higher percent checked using more library resources than they knew were available of all classes, but still checked knowing about more than they actually used.
	5. Do not use other area libraries. Have highest score for using three others.
	6. High-users also use Colorado College and Air Force Academy libraries.
	7. Have second highest score for using between 4 and 7 library resources.
	8. Know about availability of: material for class assignments; highest score for knowing about current magazines.
	9. Highest score for not knowing about: aid in finding informationl even split on microfilm.
	10. Have highest score for using inter-library loan material and for not using aid in finding information. Also use material for class assign-ments.

*Variables represent the highest percentage scores among the total population (class)

Class	Characteristics*
Senior (cont'd)	11. Do not use interlibrary loan.
	12. Do not want a credit course in library use.
	13. Do not regard library solely as as study area.
Graduate	1. Library use would be affected by one item--highest score.
	2. Have highest score for being low-users.
	3. Have low library resource knowledge but have the highest score for high resource knowledge.
	4. Use no other area libraries but have highest score for using two others.
	5. Low-users also use Colorado College library.
	6. Do not use Air Force Academy library.
	7. Use between 4 and 7 library resources. Have highest score for using 1-3 resources and 8-12 resources.
	8. Have highest score for knowing about availability of material for class assignments, aid in finding information.
	9. Use material for class assignments (highest score); do not use interlibrary loan. Highest score for use of: aid in finding information, microfilm.
	10. Want a credit class in library use.

Appendix F

The University of Colorado at Colorado Springs was founded in 1964. Some of the buildings which now house classrooms, staff, maintenance and administration offices, were occupied since 1904 by patients and staff of the Cragmor TB Sanatorium. The sanatorium, located in El Paso County in what was once the northern-most sector of Colorado Springs, interred between 125 and 150 wealthy TB patients, most of whom came from the Eastern Seaboard. In the final phase of the sanatorium, 150 Navajo Indians and five private patients were housed in the buildings. During this phase, the University of Colorado at Boulder was offering courses to El Paso County residents in its extension center building in downtown Colorado Springs. Dr. George Dwire, long-time Director of the Sanatorium, instigated the sale of the property to the State of Colorado in 1964. Since then the student population has grown from 998 in 1966 to 4127 in 1977 with an average yearly growth rate of 21%.

A large majority of students work at least part-time. There are no dormitories on campus, a fact that is both cause of and effect on the "nature" of the student body. Most of the students live in El Paso County and commute to the University.

These last two factors explain, for the most part, the diversified nature of the student body. Because characteristics are diversified, questions pertaining to the students' age, sex, occupation, place of residence, and ethnic origin were excluded from the questionnaire.

References

Burns, Robt W. Jr. and Hasty, Ronald W.
1975 A survey of user attitudes toward services offered by the Colorado State University Libraries. Occasional Papers No. 121 November. University of Illinois Graduate School of Library Science.

Lubans, John
1974 Educating the Library User. N.Y.: R.R. Bowker Co.

Nie, Norman et al
1970 Statistical Package for the Social Sciences. N.Y.: McGraw-Hill Book Co.

Paisley, Wm. J.
1965 The Flow of Science Information: A Review of Literature. Stanford, Calif.: Institute for Communication Research. 2-60.

Rosenberg, Morris
1968 The Logic of Survey Analyses. N.Y.: Basic Books.

Tanis, Norman E.
1968 Library Services for Kansas State College. Pittsburg, Kansas: Kansas State College.

Tauber, Maurice F. and Gormley, Mark M.
1968 A Survey of the Libraries of Kenyon College. Gambrier, Ohio.

Waber, F. E. G.
1974 A Study of Library Users and Use in a University. American Society for Information Science.